#### **Feed Ground History**

- 1908- Severe winter in Jackson hole. Hundreds of elk died of starvation.
- 1912- Legislation appropriated \$5000.00 to feed elk on the National Elk Refuge.
- 1929- Wy Game & Fish started three feed grounds to prevent large scale die-offs. These feed grounds were Green River lakes, Greys River and Gros Ventre.
- These feed grounds were started to prevent starvation and large scale die-offs.

### **Early History**

- Elk were fed at many different locations in the next 35 years.
- The Department has fed elk in at least 51 different locations since 1948.
- Many of the Pinedale feed grounds were started in the late 40's and 1950's to prevent damage to stored and un-stored hay.
- Many sites were temporary and only small amounts of hay were fed.
- By the early 1960's the present system was in place.

### **Feed Ground History Continued**

- The final two feed grounds were started in the 1970's.
- We currently manage 22 State operated feed grounds in addition to the National Elk Refuge.
- These feed grounds are located in Sublette, Lincoln and Teton Counties.
- 15-16,000 elk are fed annually on the 22 State operated feed grounds.
- We have approx. 4,000 elk that winter out on native winter ranges.
- Length of feeding season can be from 70-160 days.
- Hay is generally fed with draft horses and sled.
- We have experimented with one ton bales and tractors on several feed grounds.
- The Dept. purchases between 6000-9000 tons of hay annually.
- The majority of the hay comes from Star Valley, Pinedale and some from Idaho.
- All of the hay hauling is contracted out and takes approx. 4-5 months to complete hauling.
- The majority of the hay purchased is certified weed free hay.
- Elk are generally fed between 8 and 10 lbs. Daily.
- Elk feeders are hired on a contract basis and some feeders feed more than one feed ground.

## **NER Feeding Operation**

- National elk refuge fed approx. 5900 elk this past winter.
- Feed alfalfa pellets at four different locations with mechanized equipment.
- Feed long lines to encourage dispersal of animals.
- Feed Bison at separate locations to alleviate conflicts when necessary.

# **Feed Ground Locations**

#### **Development**

- Development has blocked crucial elk migration routes and has taken up crucial space and needed habitat for elk survival.
- There has been 4,080 new housing starts in the past 10 years in Lincoln, Sublette and Teton Counties.
- Elk feed grounds have been strategically placed to gather elk and short stop them from entering private lands and causing damage.

### **Regulatory Factors**

- Any new feed ground requires commission approval. "Last one created was in 1979"
- Regional Commissioner must approve temporary/emergency feeding.
- Commission has established quotas for each feed ground and quotas for each herd unit.
- State law requires Department to compensate landowners for damage to crops by big game animals.

#### **Elk Feeding - Pros**

- Feed grounds gather elk at specific locations to prevent damage to stored and unstored crops.
- Feed grounds allow Dept. to maintain stable elk numbers.
- Feed grounds prevent starvation and are popular with much of the public.
- Feeding prevents elk and cattle commingling.
- Feeding prevents elk/vehicle collisions.
- Feeding prevents damage to shrubs, fences etc.
- Feeding maintains high elk numbers and allows humans and elk to co-exist.
- Feeding allows elk to be vaccinated against Brucellosis.
- Feeding allows Dept. to get accurate classifications on large elk herds to better structure population models and set elk hunting seasons.
- Feeding elk reduces competition with other species for crucial winter habitat.

## **Feeding Cons**

- Feeding congregates elk and increases disease transmission.
- Feeding is expensive (Costs the Dept. approx. 1.3 million dollars annually to manage 22 feed grounds. This doesn't include research on diseases.
- Feeding can send a message that habitat is not important!!

## Goals/objectives for feed ground management

- Provide nutritional supplement to wintering elk that frequent elk feed grounds.
- To minimize damage conflicts on adjacent private lands.
- To control Brucellosis within elk and minimize risk of transmission to cattle.
- To save money were possible by management of starting/stopping dates.

• To reduce the dependency of elk on feed grounds, primarily through improved native ranges.

#### What are we doing to reduce prevalence levels of Brucellosis?

- Vaccinate elk with Strain 19.
- Start feeding as late as possible and quit feeding as soon as possible.
- Spread elk out as much as possible on feed grounds.
- Try and feed on clean snow daily.
- Prevent elk from commingling with cattle.
- Provide stack yard material to ranchers.
- Provide habitat improvements to encourage elk to be less dependant of feed grounds.
- Construct elk fences to prevent elk from migrating onto private land.
- Haze elk back to feed grounds when they become displaced onto private land.
- Develop late season hunts/kill permits to remove problem elk when all other attempts have failed.
- Immediately, collect any aborted fetus found on feed grounds and send to lab for testing.

#### **Abortion Rates**

- How often do we find aborted fetus's on feed grounds??
- 8 Pinedale feeders with a combined 129 years of service were recently polled.
- Out of 8 feeders with a combined 129 years of service, they fed 74,032 elk.
- Out of 74,032 elk fed, 28 abortions were detected by feeders.
- This represents .037%
- Keep in mind, feeders probably don't find all of them, but feeders are on the feed ground every day for the length of the feed season.
- Sometimes a feeder may only notice a blood spot in the snow as predators and birds clean them up very quickly.
- Aborted fetus's are almost always found during the months of February and March.

### **BFH Program**

- 1991- BFH program was started to address Brucellosis issues.
- The Dept. implemented the program to manage Brucellosis in elk.
- Big Piney was chosen as a study area for habitat improvements and possibly phasing out or combining several feed grounds.
- The BFH program is a multi-faceted approach utilizing the following management strategies:
- Vaccination (as many elk as possible with Strain 19)
- Minimizing the number of days that elk are fed (and congregated) to the extent possible.
- Keeping elk and cattle separated through fencing and/or actual hazing of elk when necessary.
- Habitat improvement projects adjacent to feedgrounds and reduce the elks dependence on supplemental feeding.
- Information and education.

#### Various Techniques Used

- Prescribed Fire
- Aspen Cutting
- Range Pitting

### **Brief History Piney BFH Area (projects completed)**

- 11 vegetation enhancement projects totaling 9,371 acres.
- 3 mechanical treatments = 4,476 acres.
- 3 Herbicide (spike) treatments = 1,355 acres.
- 5 prescribed burns = 3,540 acres.

### **Pinedale BFH Habitat Projects**

- 9 prescribed burns = 12,300 acres
- 2 herbicide (spike) treatments = 620 acres.
- 3 mechanical (cutting) treatments = 110 acres.

#### **Jackson BFH Habitat Projects**

- 28 projects completed from 1990-2003
- 23 prescribed burns totaling 44,600 acres.
- 5 mechanical projects totaling 1,100 acres.

### **Habitat Enhancement Summary**

- 53 completed projects totaling 68,101 acres since 1990.
- 37 prescribed burns = 60,440 acres.
- 5 herbicide treatments = 1,975 acres.
- 11 mechanical treatments = 5,686 acres.

#### Elk Surveillance

- Over 10,000 elk trapped since 1971.
- Over 3,500 females blood tested since 1971.
- All elk that are trapped are ear tagged. This provides needed distribution data.
- All adult cows are collared. We have learned over years that elk frequent different feed grounds from year to year.

#### What have we learned from all of this since 1990???

- Habitat improvements can be effective, but need to be strategically placed and often require cooperation/funding from other land management agencies.
- Habitat improvements can be very beneficial on light snow years, but often times do not provide enough forage for elk on a heavy snow year.

## "Winter Elk On Native Ranges"

- Winter snow depths preclude many areas as suitable winter range.
- Winter snow depths preclude many areas as suitable winter range There currently is not enough winter range to support present herds.
- Winter snow depths preclude many areas as suitable winter rangeWe need to be careful that we don't build elk numbers where we don't want them and then have a heavy snow year.
- Winter snow depths preclude many areas as suitable winter rangeElk will generally move down country and find the first available food source, which is generally a haystack or cattle feed line.

### **Suggested Strategies "Migration to Red Desert"**

- Did this actually ever happen? And how many elk actually made this migration??
- This is based on the premise that thousands of elk once migrated from Jackson to the Red Desert.
- It probably never happened and if it actually did it wouldn't happen today because of development and private land holdings.
- The Dept. does not see this as a viable option today because of disease issues, methods and no surplus forage to compete with other species.

### **Management Suggestions "Eliminate Feed Grounds"**

- This would increase elk/livestock interactions.
- We would have to decrease elk numbers 70-80%, or 10-12 thousand elk.
- A loss of about 22 million dollars to the states economy from NW. Wyoming.
- Increase damage claims to the Dept. cause poor working relationships with livestock producers and local ranchers.
- Increased conflicts with Highways, fences etc.
- What works in one situation may not work in another.
- Are sportsman, hunters, outfitters and the general public willing to decrease their elk herd by 80%
- Who will be responsible for large scale die-offs due to starvation?
- How will elk be vaccinated?
- What will keep elk from commingling with cattle and causing damage to crops?
- After 5 years of drought can our current winter range support more elk without affecting current deer and antelope populations?

#### **Questions to Consider**

- If we had available forage for elk, how would we get them through private property?
- How would we keep them on native winter range during a bad winter??
- Where would they go? Would they starve?
- These are all important questions that need to be answered.